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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,802	10/22/2003	Dan W. Pratt	COR-1075-US	6673
24923	7590	12/02/2005		
PAUL S MADAN MADAN, MOSSMAN & SRIRAM, PC 2603 AUGUSTA, SUITE 700 HOUSTON, TX 77057-1130			EXAMINER BERGIN, JAMES S	
			ART UNIT 3641	PAPER NUMBER

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/691,802

Applicant(s)

PRATT ET AL.

Examiner

James S. Bergin

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31, 33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) 6-14, 18, 19, 24 and 26-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 15-17, 20-23, 25, 33 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                                 |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                            | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/22/2003</u> . | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

1. Applicant's election without traverse of invention I, the shaped charge penetrator, species A, sub-species alpha 1, and sub-species beta 1 in the reply filed on 9/12/2005 is acknowledged. As noted by the applicants' in the response filed 9/12/2002, the claims that read on this election are, claims 1-5, 15-17, 20-23, 25, 33 and 34.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In lines 2, 3, "the first liner membrane" lacks a proper antecedent basis.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-5, 15-17, 20-23, 25, 33 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Powell (US 6,786,157 B1).

Regarding claim 1, Powell discloses a shaped charge penetrator (fig. 1) inherently capable of forming a perforation in a subterranean formation (col. 8, lines 13-30), the penetrator comprising a charge case, an explosive charge, inner 22 and outer liner membranes 32 with a particulated filler material therebetween (col. 4, lines 5-37).

Regarding claims 2 and 33, Powell discloses a metal cap 46 (aluminum tape) disposed upon the first liner membrane 22.

Regarding claim 3, 22, 23, Powell discloses that the filler comprises powdered aluminum.

Regarding claim 4, due at least to manufacturing imperfections, it is inherent that some of the particles of Powell's liner would be at least marginally coarser than others of the particles forming the liner filling 45.

Regarding claim 5, Powell's liner membranes 22, 32 are made of glass reinforced plastic.

Regarding claim 25, Powell's liner membrane 22, 32 are conical (fig. 1, col. 4, lines 17-20).

Regarding claim 15, Powell's liner membranes 22, 32 are contiguously affixed to one another (fig. 1, col. 4, lines 15-23) to completely enclose the filler material 45.

Regarding claims 16, 17, 21 Powell's aluminum filler material 45 has a density that is inherently below 2.7 g/cc (note the applicants' admission on page 9 of the specification regarding the density of aluminum), which would inherently be below formation density in a downhole environment.

Regarding claim 20, Powell's liner membrane comprises the first and second liner membranes 22, 32, the filler material 45 encapsulated therebetween. The density of Powell's aluminum filler material is below 2.7 g/cc which is inherently below formation density in a downhole environment (note the applicants' admission on page 9 of the specification regarding the density of aluminum).

Regarding claim 34, it is inherent to Powell that the liner forming a precursor jet is conformal to the charge case (fig. 1).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fong (US 6,510,797 B1); Fong (US 6,308,634 B1).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Bergin whose telephone number is 571-272-6872. The examiner can normally be reached on Monday - Wednesday and Friday, 8.30 - 5.30.

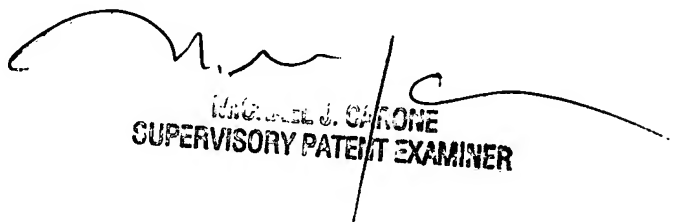
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3641

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James S. Bergin



MICHAEL J. CARONE  
SUPERVISORY PATENT EXAMINER